

10/581,545 - R1 - Brown et al. - SRNT - CAPLUS structure search

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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 DEC 01 ChemPort single article sales feature unavailable  
NEWS 3 FEB 02 Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE  
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NEWS 10 FEB 23 Several formats for image display and print options discontinued in USPATFULL and USPAT2  
NEWS 11 FEB 23 MEDLINE now offers more precise author group fields and 2009 MeSH terms  
NEWS 12 FEB 23 TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 MeSH terms  
NEWS 13 FEB 23 Three million new patent records blast AEROSPACE into STN patent clusters  
NEWS 14 FEB 25 USGENE enhanced with patent family and legal status display data from INPADOCDB  
NEWS 15 MAR 06 INPADOCDB and INPAFAMDB enhanced with new display formats  
NEWS 16 MAR 11 EPFULL backfile enhanced with additional full-text applications and grants  
NEWS 17 MAR 11 ESBIOBASE reloaded and enhanced  
NEWS 18 MAR 20 CAS databases on STN enhanced with new super role for nanomaterial substances  
NEWS 19 MAR 23 CA/CAplus enhanced with more than 250,000 patent equivalents from China  
NEWS 20 MAR 30 IMSPATENTS reloaded and enhanced  
NEWS 21 APR 03 CAS coverage of exemplified prophetic substances enhanced  
NEWS 22 APR 07 STN is raising the limits on saved answers  
NEWS 23 APR 24 CA/CAplus now has more comprehensive patent assignee information  
NEWS 24 APR 26 USPATFULL and USPAT2 enhanced with patent assignment/reassignment information  
NEWS 25 APR 28 CAS patent authority coverage expanded  
NEWS 26 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced  
NEWS 27 APR 28 Limits doubled for structure searching in CAS REGISTRY  
NEWS 28 MAY 08 STN Express, Version 8.4, now available

NEWS 29 MAY 11 STN on the Web enhanced  
NEWS 30 MAY 11 BEILSTEIN substance information now available on STN Easy  
NEWS 31 MAY 14 DGENE, PCTGEN and USGENE enhanced with increased limits for exact sequence match searches and introduction of free HIT display format  
NEWS 32 MAY 15 INPADOCDB and INPAFAMDB enhanced with Chinese legal status data

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE 'HOME' ENTERED AT 15:30:57 ON 24 MAY 2009

=>  
=> file reg  
COST IN U.S. DOLLARS  
  
FULL ESTIMATED COST

SINCE FILE ENTRY	0.22	TOTAL SESSION	0.22
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FILE 'REGISTRY' ENTERED AT 15:31:12 ON 24 MAY 2009  
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STRUCTURE FILE UPDATES: 22 MAY 2009 HIGHEST RN 1148179-26-3  
DICTIONARY FILE UPDATES: 22 MAY 2009 HIGHEST RN 1148179-26-3

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$\Rightarrow$

Uploading A:\10.581545.R1.Brown et al..SRNT.CAPLUS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 15:32:42 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 8 TO 329

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 sss full

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FULL SCREEN SEARCH COMPLETED - 176 TO ITERATE

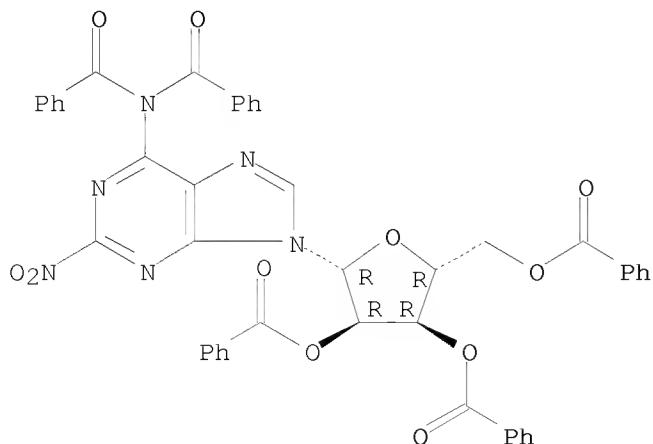
100.0% PROCESSED 176 ITERATIONS 6 ANSWERS  
SEARCH TIME: 00.00.01

L3 6 SEA SSS FUL L1

=> d scan

L3 6 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN Adenosine, N,N-dibenzoyl-2-nitro-, 2',3',5'-tribenzoate  
MF C45 H32 N6 O11

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

FILE 'CAPLUS' ENTERED AT 15:33:15 ON 24 MAY 2009  
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FILE COVERS 1907 - 24 May 2009 VOL 150 ISS 22  
FILE LAST UPDATED: 22 May 2009 (20090522/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CPlus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate

=> d his

(FILE 'HOME' ENTERED AT 15:30:57 ON 24 MAY 2009)

FILE 'REGISTRY' ENTERED AT 15:31:12 ON 24 MAY 2009  
L1 STRUCTURE uploaded  
L2 0 S L1 SSS SAM  
L3 6 S L1 SSS FULL

FILE 'CPLUS' ENTERED AT 15:33:15 ON 24 MAY 2009

=> s 13  
L4 17 L3

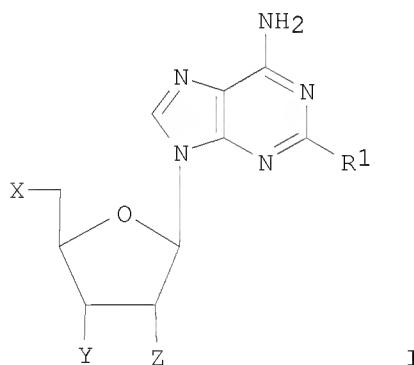
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YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:end
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=> d 14 ibib abs hitstr 1-17

L4 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:11519 CAPLUS  
 DOCUMENT NUMBER: 148:100840  
 TITLE: Preparation of nucleosides as therapeutic compounds  
 for the treatment of pain and inflammation  
 INVENTOR(S): Higginbottom, Michael; Savory, Edward Daniel; Brown,  
 Giles Albert; Horgan, Viet-Anh Anne; Chapman, Emma  
 Jane  
 PATENT ASSIGNEE(S): Biovitrum AB, Swed.  
 SOURCE: PCT Int. Appl., 70pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008000745	A2	20080103	WO 2007-EP56378	20070626
WO 2008000745	A3	20080417		
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2007263728	A1	20080103	AU 2007-263728	20070626
CA 2654375	A1	20080103	CA 2007-2654375	20070626
US 20080076776	A1	20080327	US 2007-823377	20070626
IN 2008KN04769	A	20090313	IN 2008-KN4769	20081125
PRIORITY APPLN. INFO.:			SE 2006-1398	A 20060627
			US 2006-837146P	P 20060811
			WO 2007-EP56378	W 20070626

OTHER SOURCE(S): MARPAT 148:100840  
 GI



AB Nucleosides I, when X = Y = OH, R1 is OCH<sub>2</sub>CF<sub>2</sub>CF<sub>3</sub>, phenoxy (substituted with 3-(4-trifluoromethylphenyl), 3,4-dichloro,

(3-trifluoromethyl, 4-fluoro), (3-trifluoromethyl, 4-chloro), (3-chloro, 4-cyano), or 3,5-bis(trifluoromethyl)), 1-piperazinyl(4-(3,4-dichlorophenyl)), Ph (substituted with 3,4-dichloro, 3,5-difluoro, 3,5-bis(trifluoromethyl) or 3,4,5-trifluoro) or 2-benzofuranyl; or when X = Y = OH and Z = OMe, R1 is OCH<sub>3</sub>, OCH<sub>2</sub>CHF<sub>2</sub>, OCH<sub>2</sub>cyclopentyl, O-(2,5-difluorophenyl) or (S)-sec-butylamino; or when X = H and Y = Z = OH, R1 is n-hexylamino or cyclopentylamino; or when (IV) X = Z = OH and Y = H, R1 is cyclopentylamino; were prepared for the treatment of pain and inflammation. Thus, nucleoside I (X = Y = Z = OH, R1 = CH<sub>2</sub>CF<sub>2</sub>CF<sub>3</sub>) was prepared and tested for the treatment of pain and inflammation.

IT 62374-23-6P 854158-99-9P

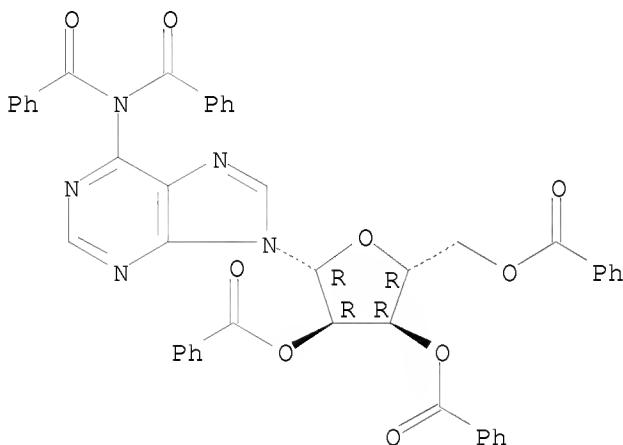
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of nucleosides as therapeutic compds. for treatment of pain and inflammation)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

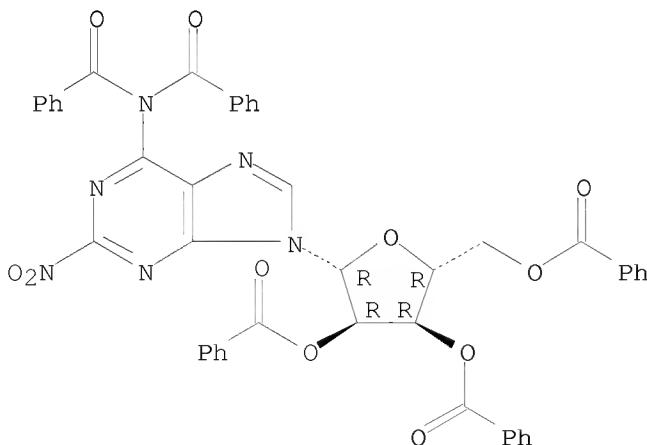
Absolute stereochemistry.



RN 854158-99-9 CAPLUS

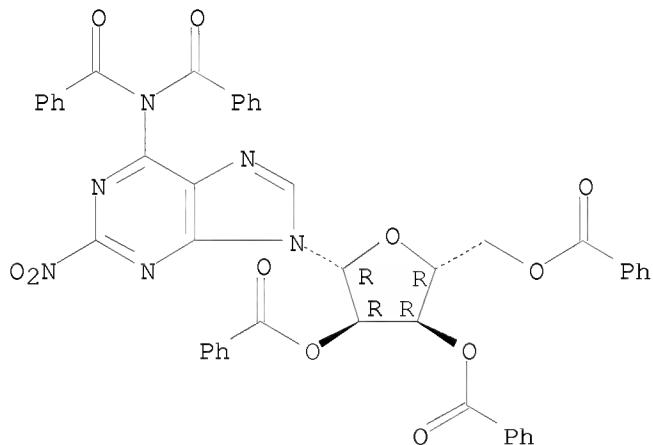
CN Adenosine, N,N-dibenzoyl-2-nitro-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2006:1143133 CAPLUS  
 DOCUMENT NUMBER: 146:82151  
 TITLE: A novel method for the introduction of fluorine into the purine 2-position: synthesis of 2-fluoroadenosine and a formal synthesis of the antileukemic drug fludarabine  
 AUTHOR(S): Braendvang, Morten; Gundersen, Lise-Lotte  
 CORPORATE SOURCE: Department of Chemistry, University of Oslo, Oslo, 0315, Norway  
 SOURCE: Synthesis (2006), (18), 2993-2995  
 CODEN: SYNTBF; ISSN: 0039-7881  
 PUBLISHER: Georg Thieme Verlag  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 146:82151  
 AB A novel method for the introduction of fluorine in the purine 2-position is described and employed in the synthesis of a potential antimycobacterial compound. Also 2-fluoroadenosine has been synthesized for the first time from adenosine with perbenzoylated 2-nitroadenosine as a key intermediate. Mild reaction conditions are employed and few synthetic steps are required. The novel synthesis of fluoroadenosine can be regarded as a formal synthesis of the antileukemic drug fludarabine phosphate.  
 IT 854158-99-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
     (synthesis of 2-fluoroadenosine as a synthon toward a formal synthesis of the antileukemic drug fludarabine)  
 RN 854158-99-9 CAPLUS  
 CN Adenosine, N,N-dibenzoyl-2-nitro-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



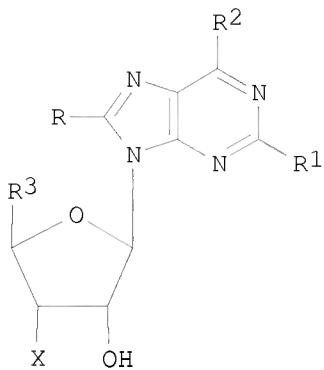
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:1004549 CAPLUS  
 DOCUMENT NUMBER: 143:286636  
 TITLE: Preparation of nucleosides as adenosine receptors and used for the treatment of pain and inflammation

INVENTOR(S): Pritchard, Martyn; Ouzman, Jacqueline; Savory, Edward;  
 Brown, Giles  
 PATENT ASSIGNEE(S): Cambridge Biotechnology Limited, UK  
 SOURCE: PCT Int. Appl., 81 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005084653	A2	20050915	WO 2005-GB800	20050304
WO 2005084653	A3	20060518		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
WO 2004079329	A2	20040916	WO 2004-GB902	20040305
WO 2004079329	A3	20041209		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
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AU 2005218997	A1	20050915	AU 2005-218997	20050304
CA 2557285	A1	20050915	CA 2005-2557285	20050304
EP 1749016	A2	20070207	EP 2005-717878	20050304
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1946732	A	20070411	CN 2005-80007119	20050304
BR 2005008488	A	20070731	BR 2005-8488	20050304
JP 2007526291	T	20070913	JP 2007-501345	20050304
MX 2006010075	A	20070410	MX 2006-10075	20060904
NO 2006004365	A	20061122	NO 2006-4365	20060926
KR 2007004792	A	20070109	KR 2006-720304	20060929
IN 2006CN03674	A	20070706	IN 2006-CN3674	20061005
US 20080221060	A1	20080911	US 2007-598520	20071207
PRIORITY APPLN. INFO.:				
		GB 2004-5009	A	20040305
		GB 2004-5012	A	20040305
		WO 2004-GB902	A	20040305
		GB 2004-12261	A	20040602
		GB 2004-12262	A	20040602
		GB 2004-13627	A	20040618
		GB 2004-19718	A	20040906
		GB 2004-20063	A	20040909
		GB 2004-20615	A	20040916
		GB 2003-5153	A	20030307
		WO 2005-GB800	W	20050304

OTHER SOURCE(S): CASREACT 143:286636; MARPAT 143:286636  
 GI



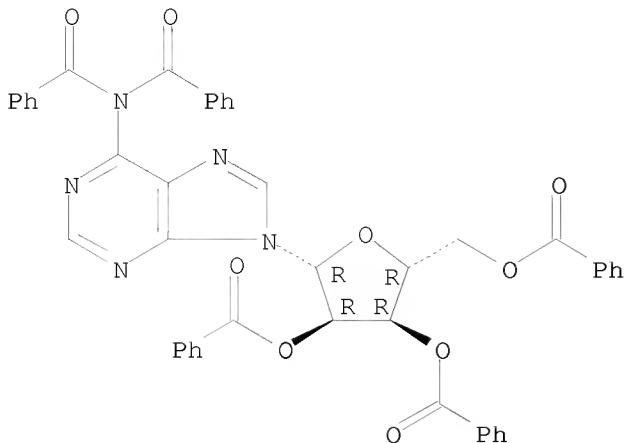
AB Nucleosides I, wherein X is H, OH; R is H, Me; R1 is H, alkoxy, OCH<sub>2</sub>-cyclopropyl, OCH<sub>2</sub>-cyclopentyl, phenoxy, OCH<sub>2</sub>CH<sub>2</sub>OH, OCH<sub>2</sub>CH<sub>2</sub>F<sub>2</sub>, (5-indanyl)oxy, alkylamino, cyclo-alkylamino, exo-norbornane, amino, phenylamino; R2 is NH<sub>2</sub>, CH<sub>2</sub>OH, NMe<sub>2</sub>, methylamino, isoamyl; R3 is CH<sub>2</sub>OH, amide, CH<sub>2</sub>NHCOPr-n, CH<sub>2</sub>NHCONHET; were prepared and used for the treatment of pain and inflammation. Title nucleosides were prepared and used the treatment of pain associated with cancer, pancreatic pain, pain associated with HIV infection, chronic neuropathic pain, lower back pain, failed back surgery pain, back pain, post-operative pain, post phys. trauma pain, cardiac pain, chest pain, joint pain, neck pain, bowel pain, phantom limb pain, obstetric pain, acute herpes zoster pain, acute pancreatitis breakthrough pain, or for the prevention, treatment, or amelioration of neuropathic or other pain caused by, or associated with diabetic neuropathy, poly-neuropathy, fibromyalgia, myo-fascial pain syndrome, osteoarthritis, post herpetic neuralgia, rheumatoid arthritis, sciatica/lumbar radiculopathy, spinal stenosis, trigeminal neuralgia, renal colic, dysmenorrhoea/endometriosis. Thus, I (R = H, R1 = OMe, R2 = NH<sub>2</sub>, R3 = CH<sub>2</sub>OH) was prepared and tested for the treatment of pain and inflammation.

IT 62374-23-6P 854158-99-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of nucleosides as adenosine receptors and used for the treatment of pain and inflammation)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

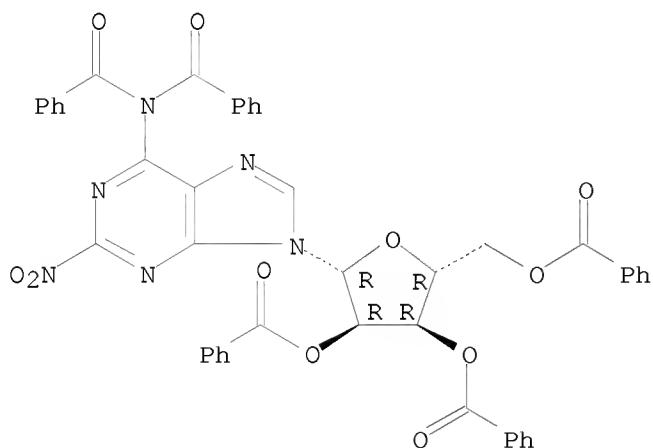
Absolute stereochemistry.



RN 854158-99-9 CAPLUS

CN Adenosine, N,N-dibenzoyl-2-nitro-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:648167 CAPLUS

DOCUMENT NUMBER: 143:267187

TITLE: Nucleic Acid Related Compounds. 127. Selective N-Deacylation of N,O-Peracylated Nucleosides in Superheated Methanol

AUTHOR(S): Nowak, Ireneusz; Conda-Sheridan, Martin; Robins, Morris J.

CORPORATE SOURCE: Department of Chemistry and Biochemistry, Brigham Young University, Provo, UT, 84602-5700, USA

SOURCE: Journal of Organic Chemistry (2005), 70(18), 7455-7458  
CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:267187

AB Solns. of peracylated adenosine, cytidine, and related nucleoside derivs. undergo selective N-deacylation upon heating at elevated temps. (oil bath  $\geq 105^{\circ}\text{C}$ ) in methanol. An increase in the bulk of the

N-acyl group has little effect on the rate of N-deacylation but increases the N/O selectivity ratio. Extended heating is required for N-deacylation with aryl-carboxylic acid derivs. Contamination with acidic or basic reagent residues is avoided.

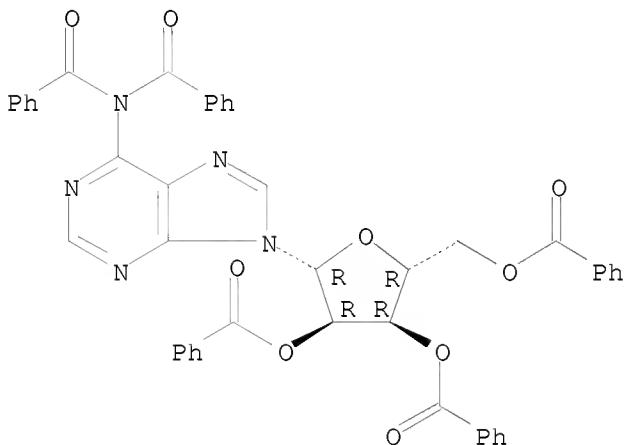
IT 62374-23-6P 863591-87-1P 863591-88-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(regioselective N-deacylation of per-acylated nucleosides in super-heated methanol)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

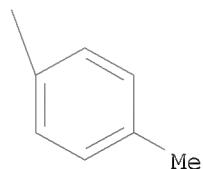
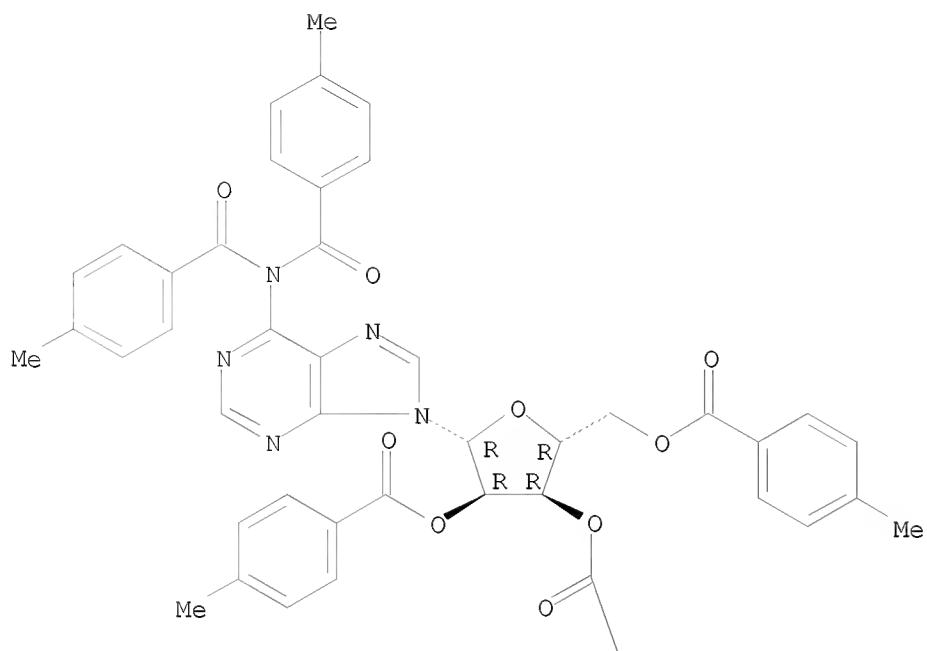
Absolute stereochemistry.



RN 863591-87-1 CAPLUS

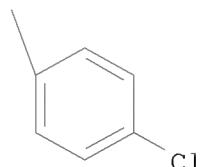
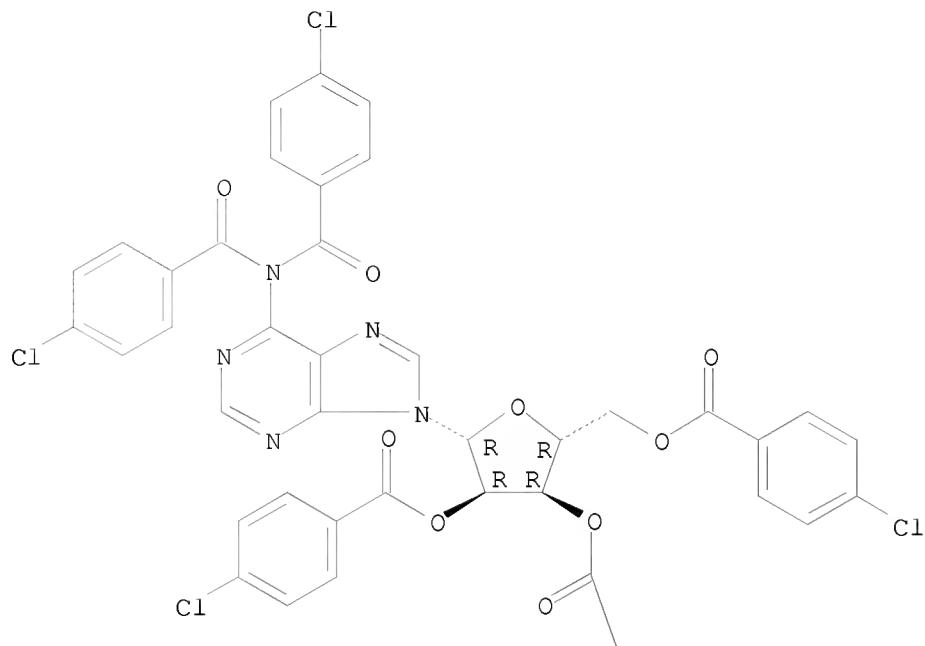
CN Adenosine, N,N-bis(4-methylbenzoyl)-, 2',3',5'-tris(4-methylbenzoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 863591-88-2 CAPLUS  
CN Adenosine, N,N-bis(4-chlorobenzoyl)-, 2',3',5'-tris(4-chlorobenzoate)  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



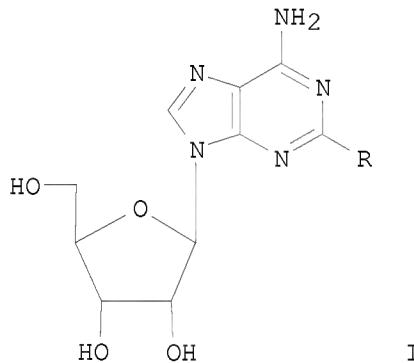
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:540588 CAPLUS  
 DOCUMENT NUMBER: 143:60193  
 TITLE: Improved synthesis of 2-substituted adenosines via nitration reaction  
 INVENTOR(S): Brown, Giles Albert; Savory, Edward Daniel; Ouzman, Jacqueline Valerie Anne; Stoddart, Alison Margaret  
 PATENT ASSIGNEE(S): Cambridge Biotechnology Limited, UK  
 SOURCE: PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005056571	A1	20050623	WO 2004-GB5090	20041203
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG  
 AU 2004296242 A1 20050623 AU 2004-296242 20041203  
 CA 2552583 A1 20050623 CA 2004-2552583 20041203  
 EP 1694691 A1 20060830 EP 2004-805918 20041203  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS  
 CN 1886414 A 20061227 CN 2004-80035597 20041203  
 CN 100455591 C 20090128  
 JP 2007513134 T 20070524 JP 2006-542018 20041203  
 NO 2006003109 A 20060905 NO 2006-3109 20060704  
 KR 2006125830 A 20061206 KR 2006-713388 20060704  
 IN 2006CN02462 A 20070608 IN 2006-CN2462 20060705  
 US 20090131651 A1 20090521 US 2008-581545 20081114  
 PRIORITY APPLN. INFO.: GB 2003-28319 A 20031205  
 GI GB 2003-28321 A 20031205  
 WO 2004-GB5090 W 20041203

OTHER SOURCE(S): CASREACT 143:60193; MARPAT 143:60193  
GI



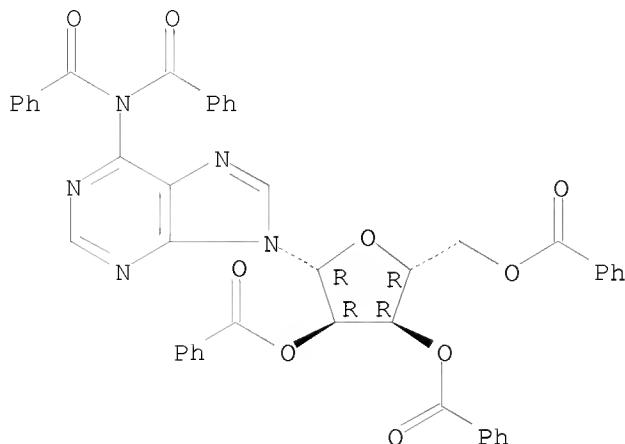
**AB** Synthesis of 2-substituted adenosines I, using 2-nitro penta-benzoyl  
 adenosine, or 2-nitro penta-acetyl adenosine, as intermediate is  
 described, wherein R = C1-6 alkoxy (straight or branched), a phenoxy group  
 (unsubstituted, or mono-, or di-substituted by halo, amino, CF<sub>3</sub>, cyano,  
 nitro, C1-6 alkyl, or C1-6 alkoxy), a benzyloxy group (unsubstituted, or  
 mono-, or di-substituted by halo, amino, CF<sub>3</sub>, cyano, nitro, C1-6 alkyl, or  
 C1-6 alkoxy), or a benzoyl group (unsubstituted, or mono-, or  
 di-substituted by halo, amino, CF<sub>3</sub>-cyano, nitro, C1-6 alkyl, or C1-6  
 alkoxy). The methods provide improved yield and purity of product. Thus,  
 nucleoside spongiosine was prepared from adenosine via benzoylation or  
 acetylation followed by nitration and methoxylation reactions.

**IT** 62374-23-6P 854158-99-9P  
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic  
 preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of 2-substituted adenosines via nitration reaction)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

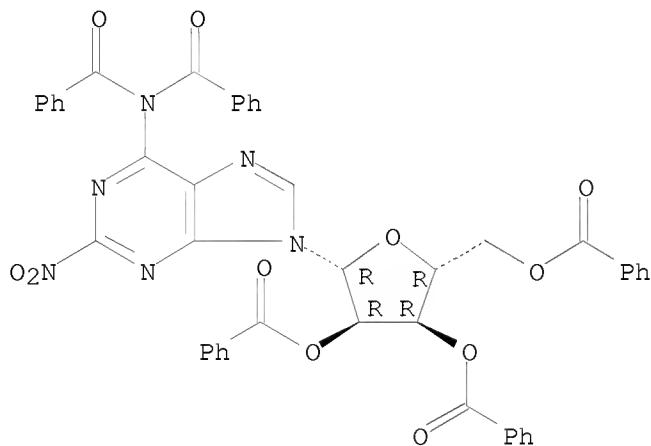
Absolute stereochemistry.



RN 854158-99-9 CAPLUS

CN Adenosine, N,N-dibenzoyl-2-nitro-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:94598 CAPLUS

DOCUMENT NUMBER: 124:261582

ORIGINAL REFERENCE NO.: 124:48483a

TITLE: Synthesis of N6,2',3',5'-tetrabenzoyl- $\beta$ -D-adenosine catalyzed by metal iodides

AUTHOR(S): Nagai, Masashi; Matsutani, Takafumi; Mukaiyama, Teruaki

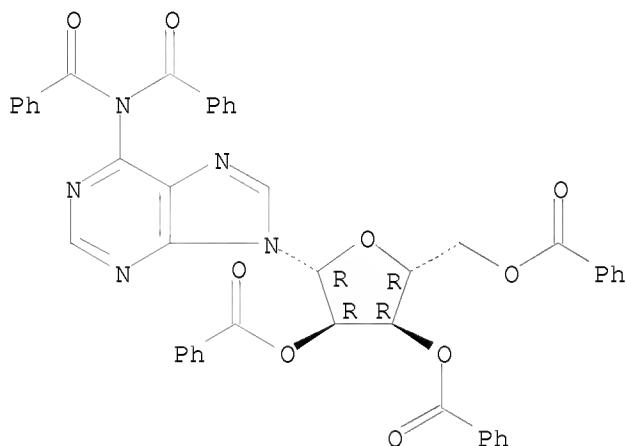
CORPORATE SOURCE: Faculty of Science, Science University of Tokyo, Tokyo, 162, Japan

SOURCE: Heterocycles (1996), 42(1), 57-63

CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 124:261582  
 AB N-glycosidation of N6-benzoyl-N6,N9-bis(trimethylsilyl)adenine with Me 2,3,5-tri-O-benzoyl- $\beta$ -D-ribofuranosyl carbonate was effectively promoted by several metal iodides and a desired coupling product, N6,2',3',5'-tetrabenzoyl- $\beta$ -D-adenosine, was obtained in high yield when SbI<sub>3</sub> or TeI<sub>4</sub> was used as a catalyst.  
 IT 62374-23-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (synthesis of tetrabenzoyladenosine catalyzed by metal iodides)  
 RN 62374-23-6 CAPLUS  
 CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1990:210963 CAPLUS  
 DOCUMENT NUMBER: 112:210963  
 ORIGINAL REFERENCE NO.: 112:35457a, 35460a  
 TITLE: Preparation of 2',5'-phosphorothioate oligoadenylates as virucides  
 INVENTOR(S): Suhadolnik, Robert J.; Pfleiderer, Wolfgang  
 PATENT ASSIGNEE(S): Temple University, USA  
 SOURCE: PCT Int. Appl., 74 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8903683	A1	19890505	WO 1988-US3634	19881018
W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU				
RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
US 4924624	A	19900515	US 1987-112591	19871022
AU 8826280	A	19890523	AU 1988-26280	19881018
EP 389521	A1	19901003	EP 1988-909900	19881018

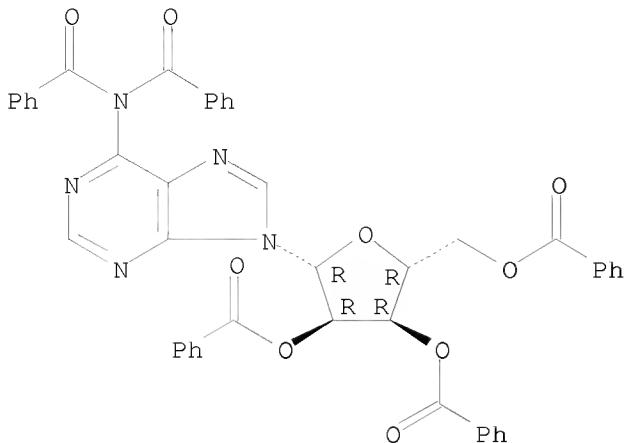
EP 389521	B1	19960320		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 04500795	T	19920213	JP 1988-509144	19881018
JP 2733777	B2	19980330		
EP 694559	A2	19960131	EP 1995-202077	19881018
EP 694559	A3	19960731		
EP 694559	B1	19990414		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 135579	T	19960415	AT 1988-909900	19881018
CA 1339953	C	19980714	CA 1988-580426	19881018
AT 178902	T	19990415	AT 1995-202077	19881018
US 5188897	A	19930223	US 1990-499109	19900326
US 5405939	A	19950411	US 1992-915771	19920716
US 5556840	A	19960917	US 1994-348419	19941202
PRIORITY APPLN. INFO.:		US 1987-112591	A 19871022	
		EP 1988-909900	A3 19881018	
		WO 1988-US3634	A 19881018	
		US 1990-499118	B1 19900326	
		US 1992-915771	A3 19920716	

OTHER SOURCE(S): CASREACT 112:210963; MARPAT 112:210963  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

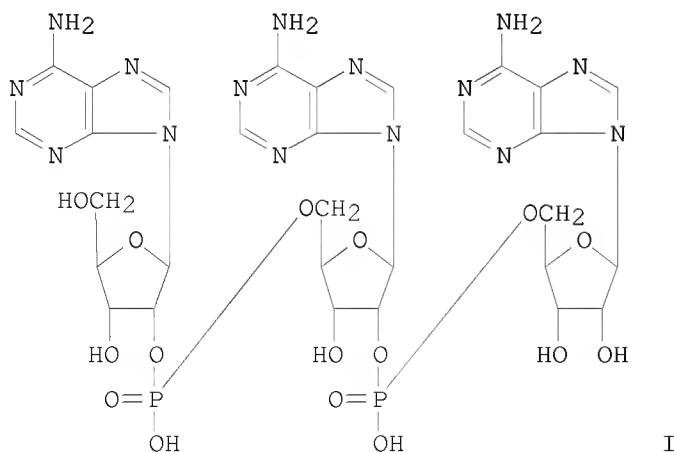
AB The optical isomers of the title compds. (I; m = 0-3; n = 1, 2) are prepared as medical and agrochem. virucides.  
 6-N-Benzoyl-3'-O-tert-butyldimethylsilyl-5'-O-monomethoxytrityl-(Sp)-P-thioadenylyl-2'-(O-(p-nitrophenylethyl)-5')-N-6-benzoyl-3'-O-tert-butyldimethylsilyl-(Sp)-P-thioadenylyl-2'-(O-(p-nitrophenylethyl)-5')-6-N-benzoyl-2',3'-bis-O-tert-butyldimethylsilyladenosine (preparation given) was detritylated with p-toluenesulfonic acid in CH<sub>2</sub>Cl<sub>2</sub>-MeOH (4:1), followed by TLC purification and reaction with 6-N-benzoyl-3'-O-tert-butyldimethylsilyl-5'-O-(4-ethoxytrityl)adenosine-2'-O-(p-nitrophenylethyl)octahydroazinoniphosphoramidite (preparation given) in MeCN. 3-Nitro-1,2,4-triazole and S in pyridine were added to give the protected SpSpSp and RpSpSp tetramers, which were deblocked by stirring with DBU in pyridine, followed by neutralization and desilylation with Bu<sub>4</sub>NF in THF, to give (Rp)-P-thioadenylyl-(2'→5')-(Sp)-P-thioadenylyl-(2'→5')-(Sp)-P-thioadenylyl-(2'→5')-adenosine (II) and its isomer. II (200 μM) inhibited the human immunodeficiency virus (HTLV-IIIBH-9) reverse transcriptase activity in vitro, as shown by a modification of the method of B. J. Poiesz, et al. (1980).  
 IT 62374-23-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and debenzylation of)  
 RN 62374-23-6 CAPLUS  
 CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1987:214280 CAPLUS  
 DOCUMENT NUMBER: 106:214280  
 ORIGINAL REFERENCE NO.: 106:34789a, 34792a  
 TITLE: Solid-phase synthesis of 2'-5' oligoadenylate-2'-5' A core  
 AUTHOR(S): He, Binglin; Chen, Weizhu; Liu, Kellang; Zong, Jianchao; Li, Naihong  
 CORPORATE SOURCE: Dep. Chem., Nankai Univ., Tianjin, Peop. Rep. China  
 SOURCE: Scientia Sinica, Series B: Chemical, Biological, Agricultural, Medical & Earth Sciences (English Edition) (1986), 29(7), 686-97  
 CODEN: SSBSEF; ISSN: 0253-5823  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB 2'-5' A core I was prepared on cross-linked polyacrylomorpholide resin as support by the phosphotriester approach using mesitylenesulfonyl chloride and N-methylimidazole as the condensing agents. Yields of the attachment

of the protected monomer to the support and subsequent 2 coupling reactions were 100, 60, and 91%, resp.

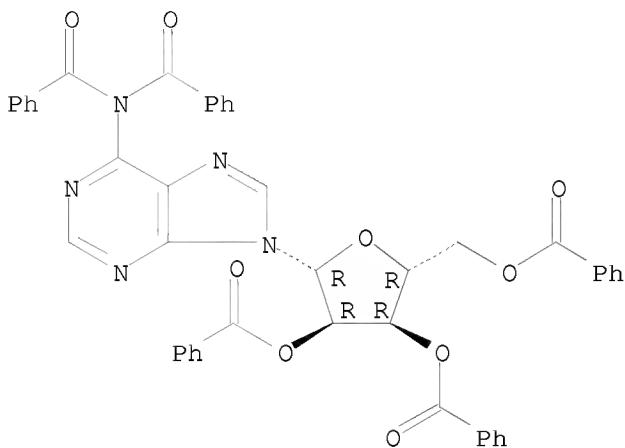
IT 62374-23-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, intermediate in solid-phase synthesis of  
2'-5'-oligoadenylate)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1986:553466 CAPLUS

DOCUMENT NUMBER: 105:153466

ORIGINAL REFERENCE NO.: 105:24745a, 24748a

TITLE: Regioselective protection of carbohydrate derivatives.  
Part 20. Simple, efficient 2'-O-deacylation of fully  
acylated purine and pyrimidine ribonucleosides through  
tert-butoxide

AUTHOR(S): Nishino, Shigeyoshi; Takamura, Hatsuko; Ishido,  
Yoshiharu

CORPORATE SOURCE: Fac. Sci., Tokyo Inst. Technol., Tokyo, 152, Japan

SOURCE: Tetrahedron (1986), 42(7), 1995-2004

CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 105:153466

AB A simple treatment of fully aroylated purine and pyrimidine  
ribonucleosides with pulverized potassium tert-butoxide in THF or  
dichloromethane under a controlled condition gave a mixture of the  
corresponding di-O-aroyl derivs. in which 2'-OH derivs. are preponderant  
over 3'-OH derivs.; 3',5'-di-O-benzoyluridine,  
N4,3',5'-tribenzyoylcytidine, N4,3',5'-tri-O-toluoylcytidine,  
N2,3',5'-tribenzyoylguanosine, and N2-  
isobutyryl-3',5'-di-O-benzoylguanosine were obtained crystalline in 80%, 78%,  
72%, 67%, and 65% yields, resp.

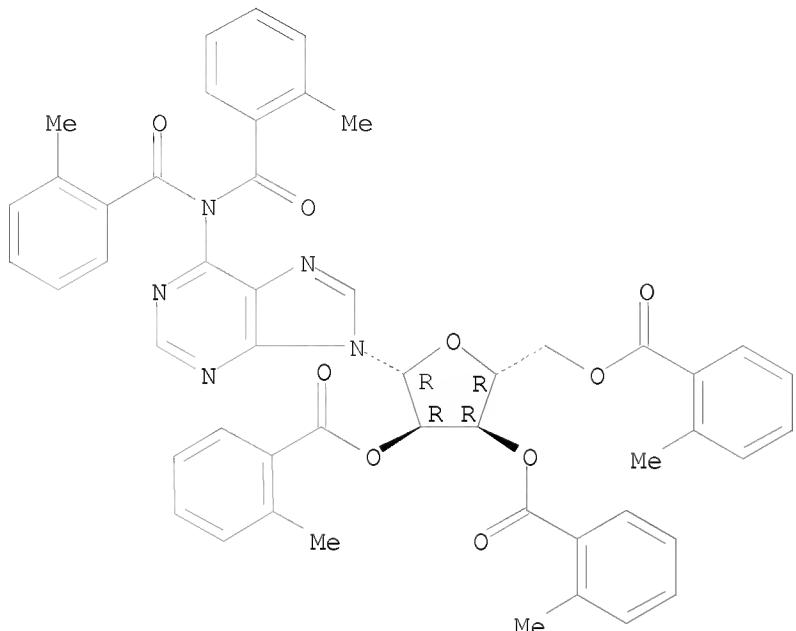
IT 104557-13-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, by regioselective O-dearoylation)

RN 104557-13-3 CAPLUS

CN Adenosine, N,N-bis(2-methylbenzoyl)-, 2',3',5'-tris(2-methylbenzoate)  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1985:62520 CAPLUS

DOCUMENT NUMBER: 102:62520

ORIGINAL REFERENCE NO.: 102:9825a, 9828a

TITLE: Photobromination of carbohydrate derivatives. Part 8.  
Reaction of furanose derivatives with  
N-bromosuccinimide. X-ray molecular structure of  
1-O-acetyl-2,5,6-tri-O-benzoyl-4-hydroxy-3,4-O-  
( $\alpha$ -succinimidobenzylidene)- $\beta$ -D-  
galactofuranose

AUTHOR(S): Ferrier, Robert J.; Haines, Stephen R.; Gainsford,  
Graeme J.; Gabe, Eric J.

CORPORATE SOURCE: Dep. Chem., Victoria Univ. Wellington, Wellington, N.  
Z.

SOURCE: Journal of the Chemical Society, Perkin Transactions  
1: Organic and Bio-Organic Chemistry (1972-1999)  
(1984), (8), 1683-7

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Photobromination of 1-O-acetyl-2,3,5,6-tetra-O-benzoyl- $\beta$ -D-gluco- or  
-galactofuranose with NBS in refluxing CC<sub>14</sub> for 0.9 h gave the title  
compound (I) in 74 and 64% yield, resp.; the structure of I was determined by  
x-ray crystallogr. Similar reactions occurred with N-bromophthalimide and  
-acetamide. Reaction of 1-O-acetyl-2,3,5-tri-O-benzoyl- $\beta$ -D-  
ribofuranose, pentabenzyldenosine, and  
1,2,3,4-tetra-O-acetyl- $\beta$ -D-xylopyranose under these conditions gave  
the 4-, 4-, and 5-bromide, resp.

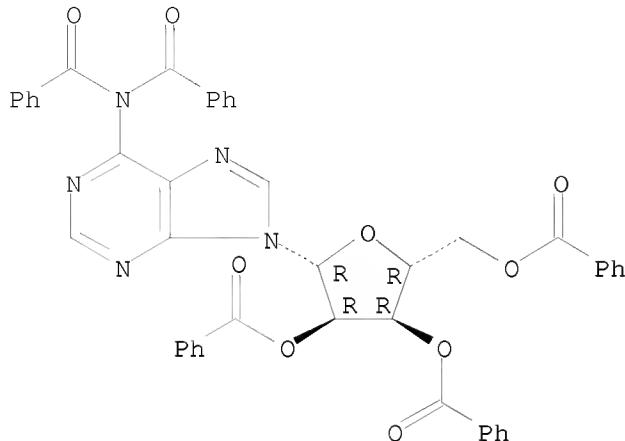
IT 62374-23-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(bromination of, by NBS)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1981:620267 CAPLUS

DOCUMENT NUMBER: 95:220267

ORIGINAL REFERENCE NO.: 95:36765a,36768a

TITLE: Nucleosides. XXXVII. Synthesis and properties of 2'-O- and 3'-O-(tert-butyldimethylsilyl)-5'-O-(4-methoxytrityl)- and

2',3'-bis(O-tert-butyldimethylsilyl)ribonucleosides - starting materials for oligoribonucleotide syntheses

Flockerzi, Dieter; Silber, Gunter; Charubala, Ramamurthy; Schlosser, Wilhelm; Varma, Rajendra Singh; Creegan, Frank; Pfleiderer, Wolfgang

AUTHOR(S): Fak. Chem., Univ. Konstanz, Konstanz, D-7750, Fed. Rep. Ger.

CORPORATE SOURCE: Liebigs Annalen der Chemie (1981), (9), 1568-85  
CODEN: LACHDL; ISSN: 0170-2041

DOCUMENT TYPE: Journal

LANGUAGE: German

AB The title nucleosides were prepared from adenosine, guanosine, cytidine, uridine, and 5,6-dihydrouridine. For example, N6-benzoyladenosine, prepared from adenosine in 2 steps, was treated with 4-methoxytrityl chloride and then silylated with Me<sub>3</sub>CSiMe<sub>2</sub>Cl to give 2'-O-(tert-butyldimethylsilyl)-, 3'-O-(tert-butyldimethylsilyl)-, and 2',3'-O-bis(tert-butyldimethylsilyl)-N6-benzoyl-5'-O-(4-methoxytrityl)adenosine (I). I was detritylated to give 2',3'-O-bis(tert-butyldimethylsilyl)-N6-benzoyladenosine. The compds. prepared were characterized by UV and <sup>13</sup>C-NMR spectroscopy.

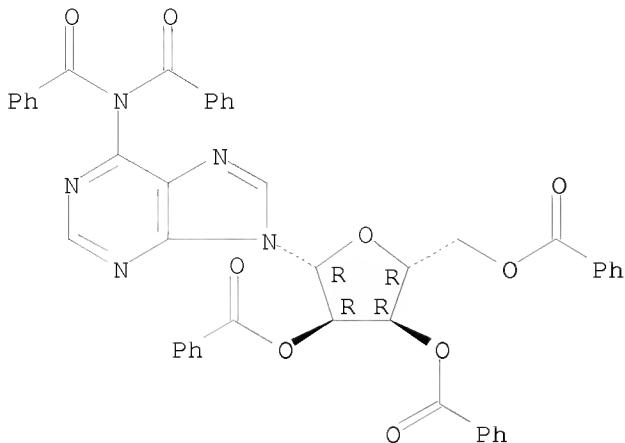
IT 62374-23-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and partial debenzylation of)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1980:59149 CAPLUS

DOCUMENT NUMBER: 92:59149

ORIGINAL REFERENCE NO.: 92:9815a,9818a

TITLE: Partial protection of carbohydrate derivatives. Part 3. Regioselective 2'-O-deacylation of fully acylated purine and pyrimidine ribonucleosides with hydrazine hydrate

AUTHOR(S): Ishido, Yoshiharu; Nakazaki, Nobuo; Sakairi, Nobuo

CORPORATE SOURCE: Dep. Chem., Tokyo Inst. Technol., Tokyo, Japan

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999)  
(1979), (8), 2088-98

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In 1:4 (volume/volume) AcOH-pyridine, partial O-deacylation of fully acylated purine and pyrimidine ribonucleosides upon hydrazinolysis was induced regioselectively in respect to 3 ester functions at the 2'-position to give the corresponding 2'-OH analogs in good yields. E.g., 3',5'-di-O-benzoyladenosine (70%), -inosine (52%), and -uridine (39%), N2-benzoyl-3',5'-diacetyl- (42%) and N2,3',5'-tribenzoylguanosine (63%) were isolated. 5'-O-Acylribonucleosides were prepared quant. using an excess of H<sub>2</sub>NNH<sub>2</sub>.H<sub>2</sub>O in 1:1 (volume/volume) CHCl<sub>3</sub>-MeOH and in pyridine. Hydrazinolysis of 3',5'-di-O-acetyl-2'-deoxyribonucleosides in pyridine gave both 5'- and 3'-O-acetyl-2'-deoxyribonucleosides (80-90% total yields). The 2'-O-acetyl group is more labile toward the nucleophile than the 3'-O-acetyl group. Possible factors involved in the regioselectivity of hydrazinolysis are discussed.

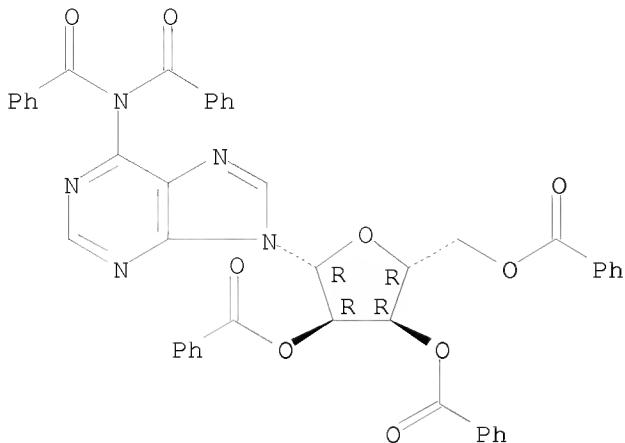
IT 62374-23-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(partial deacylation of, with hydrazine)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1979:575681 CAPLUS

DOCUMENT NUMBER: 91:175681

ORIGINAL REFERENCE NO.: 91:28351a,28354a

TITLE: Purinearabinosides

INVENTOR(S): Ishito, Ryoji; Sakairi, Nobuo

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

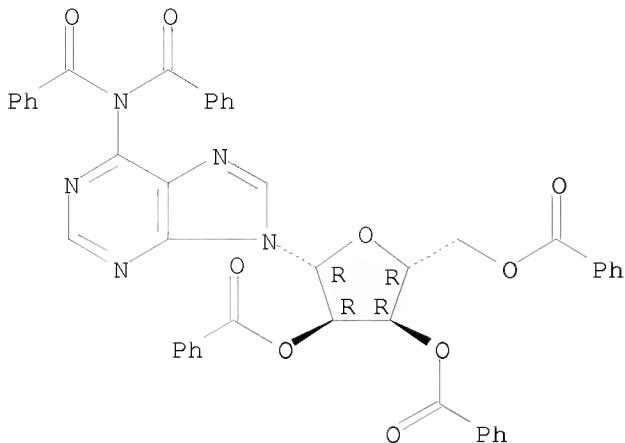
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54073795	A	19790613	JP 1977-138208	19771117
PRIORITY APPLN. INFO.:			JP 1977-138208	A 19771117
AB Stirring a mixture of 1.58 g N6,N6,2',3',5'-pentabenzoyladenosine and 0.39 mL N2H4.H2O in 4:1 pyridine-AcOH 15 h at 70-5° gave 70% 3',5'-di-O-benzoyladenosine, which (1740 mg) was stirred with 10 mL Ac2O in Me2SO overnight at room temperature to give, after neutralization and extraction				
with ACOEt, a syrup, which was stirred with 150 mg NaBH4 in 1:1 C6H6-EtOH 2 h at 0°, filtered, concentrated, and stirred with a few drops of 2 N MeONa/MeOH 2 h at room temperature to give 537 mg 9-β-D-arabinofuranosyladenine. Similarly, 9-β-D-arabinofuranosylguanine was prepared from N2,2',3',5'-tetrabenzoylguanosine via N2,3',5'-tribenzoylguanosine.				
IT 62374-23-6				
RL: RCT (Reactant); RACT (Reactant or reagent) (partial debenzoylation of)				
RN 62374-23-6	CAPLUS			
CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate	(CA INDEX NAME)			

Absolute stereochemistry.



L4 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1978:615726 CAPLUS

DOCUMENT NUMBER: 89:215726

ORIGINAL REFERENCE NO.: 89:33541a,33544a

TITLE: Nucleoside derivatives

INVENTOR(S): Ishito, Ryoji; Nakasaki, Nobuo; Sakairi, Nobuo

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

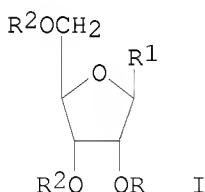
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53084972	A	19780726	JP 1976-159283	19761229
PRIORITY APPLN. INFO.:			JP 1976-159283	A 19761229



AB Nucleosides (I; R = H, R1 = nucleoside base, R2 = acyl) were prepared by reaction of I (R = R2 = acyl, R1 as before) with organic amines. Thus, a mixture of N6,N6,2',3',5'-pentabenzoyladenosine and N2H4.H2O in pyridine-AcOH was stirred 15 h at 70-5° to give 70% 3',5'-di-O-benzoyladenosine.

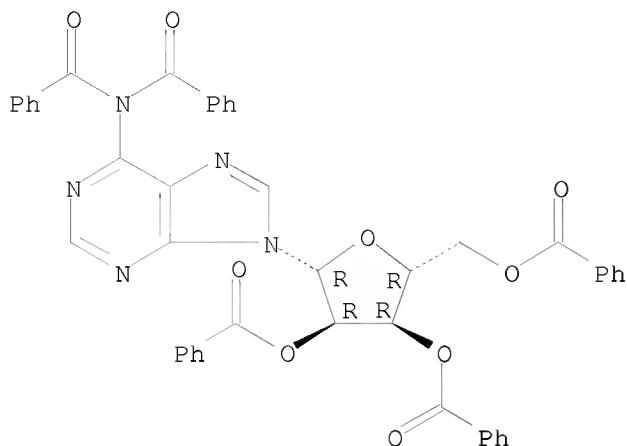
IT 62374-23-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(partial debenzylation of)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1977:468565 CAPLUS

DOCUMENT NUMBER: 87:68565

ORIGINAL REFERENCE NO.: 87:10941a,10944a

TITLE: Partial protection of carbohydrate derivatives. Part 1. Specific N-debenzoylation of fully benzoylated adenosine and cytidine with phenols and alcohols; active N-benzoyl groups

AUTHOR(S): Ishido, Yoshiharu; Nakazaki, Nobuo; Sakairi, Nobuo

CORPORATE SOURCE: Dep. Chem., Tokyo Inst. Technol., Tokyo, Japan  
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999)

(1977), (6), 657-60

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Regiospecific N-debenzoylation of the adenosine derivs. I ( $R = H, Bz, R1 = Bz$ ) (II and III, resp.) and the cytidine derivative IV ( $R = R1 = Bz$ ) (V) occurred on treatment with various hydroxy compds. to give the corresponding nucleoside benzoates I ( $R = H, Bz, R1 = H$ ) and IV ( $R = H, R1 = Bz$ ), resp. The reaction is also a benzoylation of the hydroxy compds. by the nucleoside N-benzoyl groups; the order of activity is III > II > V. N-benzoylation of I ( $R = R1 = H$ ) with 2,4-(O<sub>2</sub>N)2C<sub>6</sub>H<sub>3</sub>O<sub>Bz</sub> and of IV ( $R = R1 = H$ ) with III gave 83% II and 92% IV ( $R = Bz, R1 = H$ ), resp.

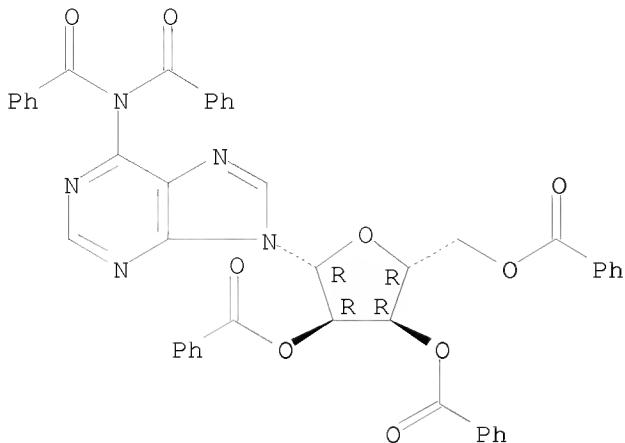
IT 62374-23-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(regiospecific debenzylation of, by hydroxy compds.)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1977:140381 CAPLUS

DOCUMENT NUMBER: 86:140381

ORIGINAL REFERENCE NO.: 86:22061a,22064a

TITLE: A novel procedure for regioselective 2'-O-deacylation of fully acylated purine and pyrimidine ribonucleosides with hydrazine hydrate

AUTHOR(S): Ishido, Yoshiharu; Nakazaki, Nobuo; Sakairi, Nobuo

CORPORATE SOURCE: Fac. Sci., Tokyo Inst. Technol., Tokyo, Japan

SOURCE: Nucleic Acids Research, Special Publication (1976), 2 (Symp. Nucleic Acids Chem., 4th, 1976), 25-8

CODEN: NARPD6; ISSN: 0309-1872

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Hydrazinolyses of e.g. N6,N6,2',3',5'-pentabenzoyladenosine, N2,2',3',5'-tetrabenzoylguanosine, in AcOH-pyridine were regioselectively induced at 2' position of the alc. functions to give 63 and 44% of the corresponding 2'-hydroxyl derivs., resp. The procedure was also effective for partial debenzoylation of benzoylated uridine and cytidine although there was poorer regioselectivity. The treatment of N4,2',3',5'-tetraacetylcytidine was accompanied by no side reactions observed in that of the corresponding benzoate. The procedure was applied to the partial deacylation of 2'-deoxyribonucleoside acylates.

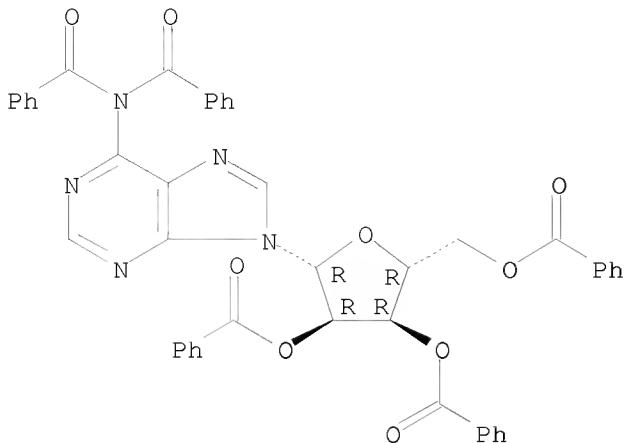
IT 62374-23-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(deacylation of, hydrazine for)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1977:106947 CAPLUS

DOCUMENT NUMBER: 86:106947

ORIGINAL REFERENCE NO.: 86:16885a,16888a

TITLE: Novel procedure for regioselective 2'-O-deacylation of fully acylated purine and pyrimidine ribonucleosides with hydrazine hydrate

AUTHOR(S): Ishido, Yoshiharu; Nakazaki, Nobuo; Sakairi, Nobuo

CORPORATE SOURCE: Dep. Chem., Tokyo Inst. Technol., Tokyo, Japan

SOURCE: Journal of the Chemical Society, Chemical

Communications (1976), (20), 832-3

CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Hydrazinolysis of N6,N6,2',3',5'-pentabenzoyladenosine, N2,2',3',5'-tetrabenzoylguanosine, and 2',3',5'-tri-O-benzoylinosine with NH<sub>2</sub>NH<sub>2</sub>.H<sub>2</sub>O in AcOH-pyridine gave 68-70% of the corresponding 2'-OH derivs. Fully benzoylated uridine and cytidine were debenzoylated similarly but the regioselectivity observed was not as good. The same trend was observed in the hydrazinolysis of the corresponding acetates. E.g., hydrazinolysis of 2',3',5'-O-acetyladenosine gave 60% 3',5'-di-O-acetyladenosine.

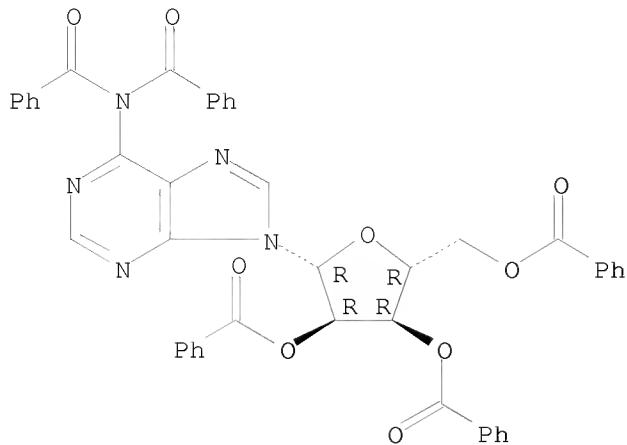
IT 62374-23-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(regioselective debenzoylation of, by hydrazinolysis)

RN 62374-23-6 CAPLUS

CN Adenosine, N,N-dibenzoyl-, 2',3',5'-tribenzoate (CA INDEX NAME)

Absolute stereochemistry.



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